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MONTHLY WHOLESALE TRADE: SALES AND INVENTORIES March 2012

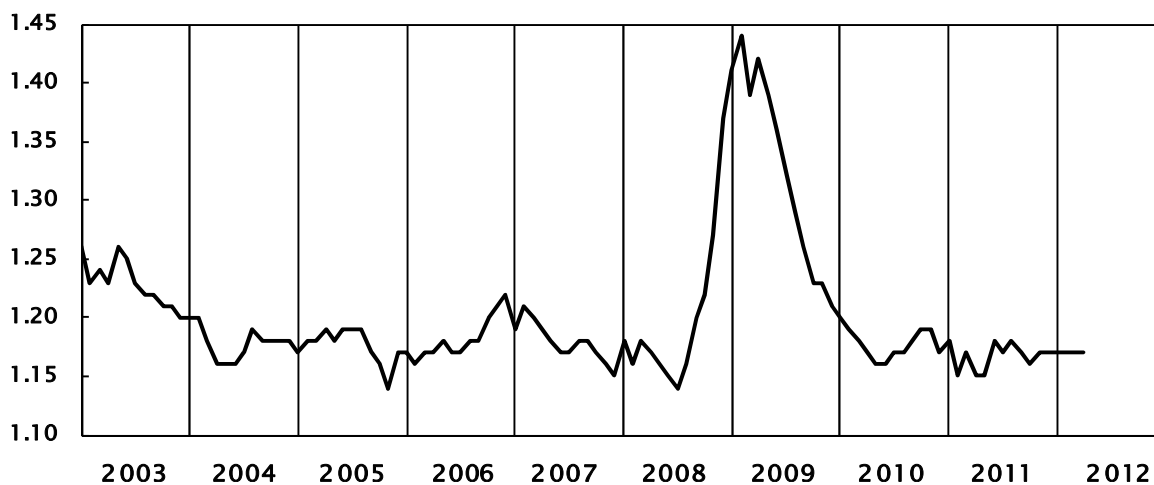
Sales. The U.S. Census Bureau announced today that March 2012 sales of merchant wholesalers, except manufacturers' sales branches and offices, after adjustment for seasonal variations and trading-day differences but not for price changes, were \$411.1 billion, up 0.5 percent (+/-0.7)* from the revised February level and were up 6.5 percent (+/-1.2%) from the March 2011 level. The February preliminary estimate was revised downward \$0.4 billion or 0.1 percent. March sales of durable goods were down 0.6 percent (+/-1.1%)* from last month, but were up 7.8 percent (+/-1.2%) from a year ago. Sales of nondurable goods were up 1.5 percent (+/-0.7%) from February and were up 5.5 percent (+/-1.4%) from last March. Sales of farm product raw materials were up 4.3 percent from last month and sales of petroleum and petroleum products were up 2.7 percent.

Inventories. Total inventories of merchant wholesalers, except manufacturers' sales branches and offices, after adjustment for seasonal variations but not for price changes, were \$480.4 billion at the end of March, up 0.3 percent (+/-0.4%)* from the revised February level and were up 8.4 percent (+/-1.2%) from the March 2011 level. The February preliminary estimate was virtually unchanged. March inventories of durable goods were up 1.0 percent (+/-0.4%) from last month and were up 10.8 percent (+/-1.6%) from a year ago. Inventories of lumber and other construction materials were up 2.1 percent from last month and inventories of machinery, equipment, and supplies were up 1.6 percent. Inventories of nondurable goods were down 0.6 percent (+/-0.5%) from February, but were up 5.1 percent (+/-1.4%) from last March. Inventories of petroleum and petroleum products were down 5.9 percent from last month and inventories of paper and paper products were down 2.0 percent.

Inventories/Sales Ratio. The March inventories/sales ratio for merchant wholesalers, except manufacturers' sales branches and offices, based on seasonally adjusted data, was 1.17. The March 2011 ratio was 1.15.

Data in this report are based on a sample and, therefore, are subject to sampling and nonsampling error. A discussion of the reliability of the estimates and general survey methodology can be found at: <http://www.census.gov/wholesale/www/how_surveys_are_collected/monthly_methodology.html>.

Monthly Inventories/Sales Ratios of Merchant Wholesalers, Except Manufacturers'
Sales Branches and Offices: 2003 to 2012
(Estimates adjusted for seasonal and trading-day differences, but not for price changes)



Monthly Wholesale Trade for April is scheduled to be released June 8, 2012 at 10:00 a.m. EDT.

For customized wholesale time series estimates by industry, visit the Census Bureau's website at <<http://www.census.gov/timeseries>>. For additional survey information, visit <<http://www.census.gov/wholesale>>.

* The 90 percent confidence interval includes zero. The Census Bureau does not have sufficient statistical evidence to conclude that the actual change is different from zero.

Table 1. Estimates of Monthly Sales, Inventories, and Inventories/Sales Ratios of Merchant Wholesalers, Except Manufacturers' Sales Branches and Offices

[Total sales and inventories estimates are shown in millions of dollars. Estimates are based on data from the Monthly Wholesale Trade Survey.]

NAICS ¹ code	Kind of Business	Sales						Inventories						Inventories/Sales Ratios		
		Monthly			Percent change			Monthly			Percent change			Ratios		
		Mar. 2012 (p)	Feb. 2012 (r)	Mar. 2011 (r)	Mar./ Feb.	Feb./ Jan.	Mar. 12/ Mar. 11	Mar. 2012 (p)	Feb. 2012 (r)	Mar. 2011 (r)	Mar./ Feb.	Feb./ Jan.	Mar. 12/ Mar. 11	Mar. 2012 (p)	Feb. 2012 (r)	Mar. 2011 (r)
Adjusted²																
42	U.S. Total	411,092	408,970	385,965	0.5	1.1	6.5	480,435	478,923	443,400	0.3	0.9	8.4	1.17	1.17	1.15
423	.Durable	184,503	185,635	171,199	-0.6	0.4	7.8	280,962	278,248	253,561	1.0	0.6	10.8	1.52	1.50	1.48
4231	..Automotive	31,874	32,427	26,345	-1.7	-0.7	21.0	44,381	44,192	38,423	0.4	-1.0	15.5	1.39	1.36	1.46
4232	..Furniture	4,494	4,484	4,336	0.2	0.2	3.6	7,198	7,129	7,106	1.0	0.4	1.3	1.60	1.59	1.64
4233	..Lumber	9,161	8,870	8,071	3.3	2.6	13.5	12,344	12,096	12,166	2.1	1.8	1.5	1.35	1.36	1.51
4234	..Prof. equip.	32,044	31,944	31,393	0.3	1.7	2.1	31,827	31,466	30,729	1.1	0.1	3.6	0.99	0.99	0.98
42343	...Comp. equip.	16,414	16,488	16,428	-0.4	2.5	-0.1	11,825	11,721	11,549	0.9	-0.3	2.4	0.72	0.71	0.70
4235	..Metals	13,196	13,345	12,348	-1.1	0.5	6.9	26,903	26,557	23,050	1.3	1.5	16.7	2.04	1.99	1.87
4236	..Electrical	31,150	31,370	31,020	-0.7	-1.4	0.4	41,083	41,089	38,401	0.0	0.2	7.0	1.32	1.31	1.24
4237	..Hardware	9,000	9,121	8,501	-1.3	3.6	5.9	17,973	17,977	16,787	0.0	0.2	7.1	2.00	1.97	1.97
4238	..Machinery	32,812	32,254	27,358	1.7	0.6	19.9	73,834	72,691	64,247	1.6	2.1	14.9	2.25	2.25	2.35
4239	..Misc. Durable	20,772	21,820	21,827	-4.8	0.8	-4.8	25,419	25,051	22,652	1.5	-0.8	12.2	1.22	1.15	1.04
424	.Nondurable	226,589	223,335	214,766	1.5	1.6	5.5	199,473	200,675	189,839	-0.6	1.4	5.1	0.88	0.90	0.88
4241	..Paper ³	7,100	6,990	7,100	1.6	0.3	0.0	7,235	7,382	7,329	-2.0	-3.2	-1.3	1.02	1.06	1.03
4242	..Drugs	36,243	36,155	34,793	0.2	-0.4	4.2	34,823	34,235	32,574	1.7	1.2	6.9	0.96	0.95	0.94
4243	..Apparel	11,464	11,472	11,166	-0.1	-0.9	2.7	21,924	21,801	20,238	0.6	-0.6	8.3	1.91	1.90	1.81
4244	..Groceries	47,901	48,294	44,574	-0.8	1.4	7.5	34,271	34,484	31,764	-0.6	1.4	7.9	0.72	0.71	0.71
4245	..Farm products	17,658	16,934	18,763	4.3	-1.0	-5.9	21,625	20,939	24,666	3.3	2.9	-12.3	1.22	1.24	1.31
4246	..Chemicals ³	9,924	9,802	9,713	1.2	1.3	2.2	11,565	11,491	10,430	0.6	1.2	10.9	1.17	1.17	1.07
4247	..Petroleum	65,766	64,055	60,775	2.7	4.4	8.2	27,697	29,437	25,889	-5.9	5.9	7.0	0.42	0.46	0.43
4248	..Alcohol	10,127	10,072	9,568	0.5	0.8	5.8	12,732	12,879	12,187	-1.1	-0.5	4.5	1.26	1.28	1.27
4249	..Misc. Nondur.	20,406	19,561	18,314	4.3	1.1	11.4	27,601	28,027	24,762	-1.5	-0.3	11.5	1.35	1.43	1.35
Not Adjusted																
Sales to date																
2012																
2011																
42	U.S. Total	430,070	382,933	413,865	12.3	0.3	3.9	483,667	483,658	446,738	0.0	1.3	8.3	1,194,848	1,095,997	
423	.Durable	194,421	171,209	185,368	13.6	0.9	4.9	279,368	278,153	252,144	0.4	1.3	10.8	535,269	481,465	
4231	..Automotive	34,647	31,487	29,559	10.0	4.7	17.2	44,692	46,181	38,730	-3.2	1.5	15.4	96,207	77,556	
4232	..Furniture	4,588	4,148	4,570	10.6	-2.1	0.4	6,996	7,001	6,914	-0.1	-0.9	1.2	12,973	12,260	
4233	..Lumber	9,143	7,593	8,281	20.4	5.8	10.4	12,937	12,205	12,750	6.0	5.8	1.5	23,914	20,041	
4234	..Prof. equip.	34,640	28,750	34,846	20.5	0.8	-0.6	30,809	31,246	29,776	-1.4	-0.6	3.5	91,913	89,416	
42343	...Comp. equip.	17,957	14,542	18,449	23.5	1.5	-2.7	11,257	11,158	11,006	0.9	-4.1	2.3	46,828	46,470	
4235	..Metals	13,724	12,704	13,237	8.0	-3.1	3.7	26,742	26,212	22,866	2.0	1.3	17.0	39,535	34,876	
4236	..Electrical	31,898	29,080	32,509	9.7	-0.4	-1.9	39,974	40,267	37,403	-0.7	-0.6	6.9	90,163	85,705	
4237	..Hardware	9,117	8,218	8,884	10.9	1.3	2.6	18,081	17,995	16,854	0.5	2.1	7.3	25,446	23,276	
4238	..Machinery	34,978	29,351	30,149	19.2	0.6	16.0	74,277	72,546	64,697	2.4	3.8	14.8	93,515	77,877	
4239	..Misc. Durable	21,686	19,878	23,333	9.1	-0.8	-7.1	24,860	24,500	22,154	1.5	-2.6	12.2	61,603	60,458	
424	.Nondurable	235,649	211,724	228,497	11.3	-0.2	3.1	204,299	205,505	194,594	-0.6	1.3	5.0	659,579	614,532	
4241	..Paper	7,270	6,599	7,490	10.2	-1.2	-2.9	7,235	7,382	7,329	-2.0	-3.2	-1.3	20,546	20,349	
4242	..Drugs	37,403	34,564	37,368	8.2	-4.3	0.1	35,311	32,934	32,900	7.2	-0.8	7.3	108,071	102,367	
4243	..Apparel	11,670	11,529	11,903	1.2	10.8	-2.0	20,652	21,430	19,105	-3.6	-4.0	8.1	33,601	32,340	
4244	..Groceries	50,440	46,362	47,516	8.8	1.8	6.2	33,825	34,070	31,288	-0.7	0.4	8.1	142,361	127,217	
4245	..Farm products	18,594	17,053	20,789	9.0	-9.0	-10.6	24,479	25,420	27,799	-3.7	0.8	-11.9	54,394	59,102	
4246	..Chemicals	10,311	9,322	10,315	10.6	-4.1	0.0	11,565	11,491	10,430	0.6	1.2	10.9	29,354	27,728	
4247	..Petroleum	67,805	60,084	63,145	12.9	-1.2	7.4	28,528	30,114	26,640	-5.3	9.2	7.1	188,731	169,722	
4248	..Alcohol	10,016	8,763	9,826	14.3	15.8	1.9	12,757	12,647	12,211	0.9	0.7	4.5	26,344	24,728	
4249	..Misc. Nondur.	22,140	17,448	20,145	26.9	5.2	9.9	29,947	30,017	26,892	-0.2	3.2	11.4	56,177	50,979	

Footnotes:

^p Preliminary estimate.^r Revised estimate.¹ For a full description of the NAICS codes used in this table, see the 2002 NAICS manual or <http://www.census.gov/epcd/naics02/naicod02.htm#N42>.² Except where indicated, sales and inventories estimates are adjusted for seasonal variation. Estimates of sales are also adjusted for trading-day differences and moving holidays. See Table 3 for the combined adjustment factors. Adjusted sales-to-date estimates are not tabulated.³ No discernible seasonal pattern for this NAICS code was detected in the latest annual review of the seasonal adjustment for inventories. Consequently, the "Adjusted" inventories estimates are equal to the "Not Adjusted" estimates.

Note:

Estimates have not been adjusted for price changes. Table 2 provides estimated measures of sampling variability. Additional information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions may be found at http://www.census.gov/wholesale/www/how_surveys_are_collected/monthly_methodology.html.

Table 2. Estimated Measures of Sampling Variability of Monthly Wholesale Sales and Inventory Estimates

[Estimates are shown as percents and are based on data from the Monthly Wholesale Trade Survey.]

NAICS code	Kind of Business	Coefficient of variation for monthly total				Standard error for monthly total				Coefficient of variation for total		Standard error for percent change
		Preliminary estimates		Final estimates		Ratio of two consecutive months		Current month to current month last year		Sales to date		Current year sales to date to previous year sales to date
		Sales	Inv.	Sales	Inv.	Sales	Inv.	Sales	Inv.	Current year	Previous year	
42	U.S. Total	1.2	1.7	1.2	1.7	0.4	0.2	0.7	0.7	1.2	1.1	0.6
423	..Durable	1.5	1.8	1.5	1.9	0.6	0.2	0.7	0.9	1.6	1.4	0.7
4231	..Automotive	4.6	5.1	3.9	5.0	1.0	0.6	1.9	2.1	4.3	3.9	2.0
4232	..Furniture	6.3	7.9	6.6	7.8	1.8	0.6	3.9	2.1	6.4	4.8	4.1
4233	..Lumber	6.1	8.4	5.2	8.7	1.8	0.8	2.4	2.0	5.5	5.8	2.3
4234	..Prof. equip.	4.2	4.4	4.0	4.5	0.8	0.4	1.1	1.6	4.1	4.7	1.2
42343	...Comp. equip.	7.1	6.0	7.0	6.1	1.2	0.5	1.6	2.2	7.1	8.5	1.9
4235	..Metals	5.3	4.9	5.4	4.9	1.8	0.5	2.1	1.8	5.8	5.5	2.1
4236	..Electrical	3.5	4.1	3.9	3.9	1.1	0.3	1.5	0.9	3.7	3.7	1.7
4237	..Hardware	5.1	5.2	5.1	5.3	0.9	0.2	1.8	1.4	5.3	4.9	1.8
4238	..Machinery	3.5	4.7	3.7	4.8	1.3	0.5	2.4	1.6	3.7	3.5	2.9
4239	..Misc. Durable	7.6	5.9	7.1	5.7	1.8	0.6	2.4	3.5	7.3	6.5	2.3
424	..Nondurable	1.6	2.4	1.5	2.5	0.4	0.3	0.8	0.8	1.5	1.4	0.8
4241	..Paper	8.1	6.9	8.1	7.1	0.8	0.6	1.7	2.8	8.0	7.6	1.7
4242	..Drugs	4.8	4.9	4.3	5.0	0.5	0.5	2.0	1.8	4.3	4.3	1.7
4243	..Apparel	4.4	6.9	5.1	6.7	2.3	1.0	3.7	4.5	4.7	4.4	4.0
4244	..Groceries	5.5	8.7	5.4	9.8	0.8	0.9	1.9	1.6	5.5	5.6	1.9
4245	..Farm products	7.3	8.5	6.4	8.5	1.8	0.9	3.2	2.6	6.8	6.2	2.8
4246	..Chemicals	5.3	7.4	5.2	6.9	1.8	1.0	2.3	1.7	5.3	5.4	2.1
4247	..Petroleum	4.4	3.9	4.2	4.0	1.5	0.7	1.3	1.2	4.2	4.1	1.1
4248	..Alcohol	4.2	4.4	4.1	4.1	0.6	0.5	1.8	2.1	4.2	5.0	2.3
4249	..Misc. Nondur.	5.2	6.9	5.6	7.1	2.0	0.5	1.3	2.9	5.6	5.6	1.1

Note:

Estimated measures of sampling variability are based on estimates not adjusted for seasonal variation, trading-day differences, or moving holidays. Additional information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions may be found at http://www.census.gov/wholesale/www/how_surveys_are_collected/monthly_methodology.html.

Reliability of the Estimates

Because the estimates presented in this report are based on a sample survey, they contain sampling error and nonsampling error.

Sampling error is the difference between the estimate and the result that would be obtained from a complete enumeration of the sampling frame conducted under the same survey conditions. This error occurs because only a subset of the entire sampling frame is measured in a sample survey. Standard errors and coefficients of variation (CV), as given in Table 2 of this report, are estimated measures of sampling variation.

The margin of sampling error, as used on page 1, gives a range about the estimate, which can be used to construct a 90-percent confidence interval. If, for example, the percent change estimate is +1.2 percent and its estimated standard error is 0.8 percent, then the margin of sampling error is $\pm 1.753 \times 0.8$ percent or ± 1.4 percent, and the 90 percent confidence interval is 1.2 ± 1.4 or -0.2 percent to 2.6 percent. If the interval contains 0, then one does not have sufficient statistical evidence to conclude at the 90 percent confidence level that the actual change is different from zero. Estimated changes shown in the text are statistically significant unless otherwise noted. For a monthly total, the estimated coefficient of variation is given. The resulting confidence interval is the estimated monthly total $\pm 1.753 \times CV \times$ (the estimated monthly total). The Census Bureau recommends that individuals using estimates in this report incorporate this information into their analyses, as sampling error could affect the conclusions drawn from the estimates.

Nonsampling error encompasses all other factors that contribute to the total error of a sample survey estimate. This type of error can occur because of nonresponse, insufficient coverage of the universe of wholesale businesses, mistakes in the recording and coding of data, model error, and other errors of collection, response, coverage, or processing. Although nonsampling error is not measured directly, the Census Bureau employs quality control procedures throughout the process to minimize this type of error.

Table 3. Combined¹ Adjustment Factors for Monthly Wholesale Sales and Inventory Estimates

[Combined adjustment factors are computed using the Census Bureau's X-13 ARIMA program and are based on data from the Monthly Wholesale Trade Survey.]

NAICS code	Kind of Business	Sales						Inventories					
		2012				2011		2012				2011	
		Apr.	Mar.r	Feb.r	Jan.	Dec.	Mar.r	Apr.	Mar.r	Feb.r	Jan.	Dec.	Mar.r
42	U.S. Total²	1.002	1.048	0.936	0.932	0.985	1.075	0.997	1.005	1.010	1.008	1.006	1.004
423	.Durable	0.984	1.056	0.922	0.917	0.999	1.087	0.996	0.993	0.999	0.995	0.987	0.993
4231	..Automotive	1.000	1.087	0.971	0.921	1.028	1.122	0.980	1.007	1.045	1.020	1.019	1.008
4232	..Furniture	0.953	1.021	0.925	0.947	0.951	1.054	0.976	0.972	0.982	0.995	0.990	0.973
4233	..Lumber	1.015	0.998	0.856	0.830	0.793	1.026	1.048	1.048	1.009	0.971	0.933	1.048
4234	..Prof. equip.	0.928	1.081	0.900	0.908	1.117	1.110	0.987	0.968	0.993	1.000	0.984	0.969
42343	...Comp. equip.	0.900	1.094	0.882	0.891	1.171	1.123	0.985	0.952	0.952	0.990	0.981	0.953
4235	..Metals	1.005	1.040	0.952	0.987	0.859	1.072	1.002	0.994	0.987	0.989	0.999	0.992
4236	..Electrical	0.955	1.024	0.927	0.917	0.959	1.048	0.981	0.973	0.980	0.988	0.986	0.974
4237	..Hardware	1.005	1.013	0.901	0.921	0.898	1.045	1.006	1.006	1.001	0.982	0.984	1.004
4238	..Machinery	1.013	1.066	0.910	0.910	1.054	1.102	1.003	1.006	0.998	0.981	0.981	1.007
4239	..Misc. Durable	0.994	1.044	0.911	0.926	0.975	1.069	1.003	0.978	0.978	0.996	0.963	0.978
424	.Nondurable	1.016	1.045	0.951	0.962	0.976	1.068	1.003	1.024	1.027	1.030	1.036	1.022
4241	..Paper ³	0.965	1.024	0.944	0.958	0.968	1.055	1.000	1.000	1.000	1.000	1.000	1.000
4242	..Drugs	0.961	1.032	0.956	0.995	0.995	1.074	0.998	1.014	0.962	0.981	1.084	1.010
4243	..Apparel	0.926	1.018	1.005	0.899	0.835	1.066	0.934	0.942	0.983	1.018	0.967	0.944
4244	..Groceries	1.006	1.053	0.960	0.957	0.992	1.066	0.982	0.987	0.988	0.997	1.017	0.985
4245	..Farm products	0.988	1.053	1.007	1.096	1.056	1.108	1.008	1.132	1.214	1.239	1.186	1.127
4246	..Chemicals ³	0.980	1.039	0.951	1.005	0.912	1.062	1.000	1.000	1.000	1.000	1.000	1.000
4247	..Petroleum	1.031	1.031	0.938	0.992	0.962	1.039	1.031	1.030	1.023	0.992	1.028	1.029
4248	..Alcohol	0.959	0.989	0.870	0.757	1.167	1.027	1.013	1.002	0.982	0.971	0.936	1.002
4249	..Misc. Nondur.	1.167	1.085	0.892	0.857	0.871	1.100	1.059	1.085	1.071	1.034	0.979	1.086

Footnotes:

^r Revised factors.

¹ Combined factors for sales include the effects of seasonal variation, trading day differences, and moving holidays. Combined factors for inventories include only the effects of seasonal variation.

² Adjusted sales and inventories estimates for detailed kind-of-business levels in Table 1 are computed by dividing each "Not Adjusted" estimate by the combined adjustment factor for the corresponding kind of business and month. Adjusted estimates for broad kind-of-business levels are obtained by summing adjusted estimates at the appropriate detailed levels. Combined factors shown for broad kind-of-business levels may be used to approximate adjusted estimates at these levels, but the resulting estimates may differ slightly from the published estimates.

³ No discernible seasonal pattern for this NAICS code was detected in the latest annual review of the seasonal adjustment for inventories. Therefore, the combined adjustment factors for inventories are set to one for this NAICS code.

Note:

The seasonal adjustment factors shown are estimates derived from a model that uses sample survey data as input. Therefore, these estimates may contain sampling error and nonsampling error. Additional information on the general form of the model and the X-13 ARIMA program may be found at <http://www.census.gov/srd/www/x12a/>.

Description of the Survey

The Census Bureau conducts the Monthly Wholesale Trade Survey (MWTS) to provide national estimates of monthly sales, end-of-month inventories, and inventories-to-sales ratios by kind of business for wholesale firms located in the United States. Specifically, the MWTS covers wholesale merchants who sell goods on their own account and include such businesses as wholesale merchants or jobbers, industrial distributors, exporters, and importers. Sales offices and branches maintained by manufacturing, refining, or mining firms for the purpose of marketing their products are not covered in this report. Also excluded is NAICS Industry Group 4251: Wholesale Electronic Markets and Agents and Brokers.

The MWTS sample was selected using a stratified, one-stage design with strata defined by kind of business (e.g., Automotive, Furniture, Lumber, etc.) and annual sales size. The sample includes firms of all sizes and is updated on a quarterly basis to account for new wholesale firms, deaths, and other changes to the wholesale universe. Each month, questionnaires are mailed to employer firms selected in a probability sample of approximately 4,500. Approximately 72% of those mailed provided data for this reporting period. Data for nonresponding firms are imputed based on data for similar-sized firms classified in the same kind of business. Approximately 32% of the total sales estimate and 30% of the total end-of-month inventories estimate is based on imputed data.

Monthly sales and inventories estimates are obtained by summing weighted data (either reported or imputed). The monthly estimates are benchmarked to annual survey estimates and are adjusted for seasonal variation and trading-day differences. Individuals who use estimates in this report to create new estimates should cite the Census Bureau as the source of only the original estimates. Additional information on the MWTS can be found on the Census Bureau website at: <http://www.census.gov/wholesale>.